

REMARKS ON THE MURICIDÆ WITH DESCRIPTIONS OF NEW SPECIES  
OF SHELLS.

BY FRANK C. BAKER.

Having recently obtained for my collection several rare species belonging to the Muricidæ, and having studied their characters carefully, I take this opportunity of commenting upon them.

**Murex tribulus** Lam.

*Murex carbonnieri* Jousseau, described in *Le Naturaliste* No. 44, p. 349 and figured in *Nouvelles Archives du Museum*, 1882, p. 31, plate 4, figures 1a, 1b, is a color variety of *M. tribulus*, characterized by chestnut dots on the spiral liræ. I have in my collection a specimen which corresponds in every respect with Jousseau's figures. There are on the body-whorl six principal liræ, with fine lines between, all punctate with chestnut; the whorls are distinctly shouldered, and the apex is identical with that of *tribulus*. In the collection of the Academy of Natural Sciences there is a suite of *tribulus* which shows the gradations from the typical form to the variety *carbonnieri*. I do not consider it distinct even as a variety.

**Murex haustellum** Linné var. *longicaudus* Baker.

I propose the above name for a variety of *M. haustellum* having an exceedingly long canal and short body-whorl. In the variety the canal is two-thirds the length of the entire shell while in the typical *haustellum* the canal occupies a half of the length; besides this, the variety is much smaller than the typical form being only 52 mm. in length, while a fair sized typical *haustellum* is 100 mill. or more. I have seen three specimens of this form one of which is in the collection of the Academy of Natural Sciences and two are in my own collection. They show little or no variation. They are from the Red Sea.

**Murex tumulosus** Sowerby.

This curious form has been considered by Mr. Tryon and other authors to be a synonymy of *M. cornutus*. Mr. Tryon remarks in his *Manual of Conchology*, vol. 2, p. 98 "Is *M. tumulosus* a hybrid?" I have recently obtained a specimen of this species and do not hesitate for a moment in considering it a synonym of *M. cornutus* Linné.

There are specimens of *cornutus* in the collection of the Academy which are almost identical with it. The sculpture, number of varices and whorls are identical in both species. Both have a straight canal differing in this respect from *M. brandaris* which has a more or less crooked canal. I do not consider *tumulosus* a hybrid but a young form of *cornutus*. The species is well figured in Sowerby's *Thesaurus Conchyliorum*, vol. 4, *Murex*, plate 18, figure 168. It was described in *Proc. Zoöl. Society*, 1840, p. 144, and first figured in Sowerby's *Conchological Illustrations*, Catalogue of *Murex*, figure 71. The locality, unfortunately, is unknown.

***Murex brandaris* Linne.**

M. Locard has described, in *Ann. Soc. Linn. Lyons*, 1885, p. 219, two species of this group under the names *trispinosus* and *brandariformis*.

The first species, *trispinosus*, will stand as a good variety but nothing more. *Brandariformis* is founded upon specimens destitute of spines and must become a synonym of *brandaris*, as I have specimens which will at once connect it with the parent form. The variety may be described as follows :

***M. brandaris* L. var. *trispinosus* Locard.**

Shell club-shaped as in typical *brandaris*; whorls 5-6, varices nine, three spines to a varix; one on, one above and one below the periphery; one row of spines on the canal; color yellowish running into chestnut on the canal and spines and dashed with the same color in many places.

Alt. 65 mill., diam. 40 mill. Aperture (excluding canal) alt. 25 mill., diam. 15 mill.

The principal difference of this variety from the typical *M. brandaris* is in the possession of the three rows of spines, and in its dark chestnut color. This variety has also been named *trifariospinoza* by Chemnitz whose name should have priority over *trispinosus* Locard.

***Ocenebra Pilsbryana* Baker.**

Shell small, fusiform, solid, with about six whorls; spire rather acute, suture scarcely impressed; sculpture of longitudinal ribs and spiral liræ; there are nine longitudinal plicæ on the last whorl, somewhat strong, rounded, raised into four elongate ridges by the stronger spiral liræ. Spiral liræ twenty-seven in number, strong, scabrous; aperture elongate oval, about half the length of the entire shell, outer lip rounded, with seven strong spiral liræ within; margin

slightly crenulate in some specimens and nearly simple in others; interior of aperture porcelain-white; columella arcuate, smooth with a slight tendency toward purple in some specimens; canal short, open, reflexed; umbilicus none, but there is a furrow in its place, bounded by a fasciole; color cinereous, overlaid by a reddish-brown epidermis.

Alt. 17, diam. 10 mill. Aperture (excluding canal) alt. 7, diam. 4 mill.

Habitat, Ceylon.

This species has features recalling the genera *Trophon*, *Urosalpinx* and *Sistrum*, but its right place in, I think, is in *Ocenebra*. There is no shell known to me with which to compare it. A distinguishing feature is the strong, scabrous spiral liration, and the absence of any interliral lirule.

***Ricinula (Sistrum) rugosoplicata* Baker.**

Shell fusiform, rather solid, with about 5-6 whorls; spire acute, nucleus broken, suture scarcely impressed; there are twelve longitudinal costæ on the last whorl crossed by about fifteen alternating stronger and weaker spiral lines, which cut the surface of the shell into large, rough knobs or plications; aperture elongate oval, considerably less than half the length of the entire shell; outer lip rounded, with its edge scalloped by the spiral liræ and with nodules within; columella arcuate, smooth, with three small tubercles near the anterior canal; canal short, open, rather wide, a little deflected to the left; umbilicus none, but there is a little chink in its place; color of shell black under a cinereous epidermis.

Alt. 12, diam. 5 mill. Aperture (excluding canal) alt. 4, diam. 2 mill.

Habitat, Turtle Bay, Lower California.

This species is separated from *Ricinula ferruginea* Reeve, its nearest ally, by the nodules of the latter species being larger and less numerous. The aperture in *ferruginea* is much larger and more elongate; the spire is shorter and the canal more open. The longitudinal ribs of *ferruginea* are seven in number while those of *rugosoplicata* are twelve in number; the spiral liræ of *ferruginea* are more numerous and not so coarse as in *rugosoplicata*.

This pretty little shell was found in a collection recently purchased by the Conchological Section of the Academy of Natural Sciences from Mr. Henry Hemphill. It is wholly distinct from any species of *Ricinula* or *Sistrum* yet described.

**Concholepas Peruvianus** Lam.

In the *Annales de Malacologie*, vol. 2, 1884-86, p. 261, M. Mabile has published a paper entitled "Étude Monographique du Genre *Concholepas*," in which he describes, and in some cases figures, a number of supposed new species of this group.

The species described are as follows :

**Concholepas similis.**

This species is an elongate variety of *C. Peruvianus*, about three-quarters as broad as long, and very scabrous on the outer surface. The tooth is but slightly produced.

**Concholepas decipiens.**

This shell is a little more rounded than the typical form with the apex nearer the margin. The surface sculpture is not as strong as in *similis*.

**Concholepas granosus.**

Founded upon specimens with a granose texture.

**Concholepas densistriatus.**

Founded upon specimens with dense and squamose sculpture.

**Concholepas rhombicus, splendens, verrucundus, Patagonicus.**

These names are founded upon variations of form and sculpture, all of which run into the parent form *Peruvianus*.

On page 280 of the same paper M. Mabile characterizes the genus *Charonia*, the type and only species being *Concholepas Kieneri* Gay, a tertiary fossil of Chili. The species, *Kieneri*, was described by Gay in the *Historia de Chile, Zoologia*, vol. 8, p. 203, and figured in the large folio atlas accompanying the work, *Conchyliologia*, No. 3, fig. 4. The figure differs from the typical *Concholepas Peruvianus* in having the columellar region free from the spreading callus so characteristic of *Peruvianus*, and in this respect resembling young forms of the latter species. The columella is much more arcuate than in *Peruvianus* and the general form of the shell is much like a *Purpura*. I doubt, however, whether the genus will stand, the differences seeming hardly to be of generic importance. It is a fossil form.

**Coralliophila galea** Chemn.

Mr. Tryon, *Manual of Conchology*, vol. 2, p. 207, makes *C. plicata* Wood the young of *galea*. I have before me upwards of seventy specimens of this form from well authenticated West Indian

localities and I am of the opinion that *plicata* is a good species. For comparison I have taken two specimens of equal size (30 mill. alt.), and placed the descriptions in parallel columns in order to show to better advantage the principal differences of the two species.

**C. galea** Chem.

Shell rounded, largely umbilicate, spire short; whorls four, apex eroded; sutures distinct but not impressed; sculpture of heavy, scabrous, spiral lines of which there are twenty-five with sometimes an intervening one; there are also nine scarcely visible, longitudinal folds; aperture ovate; outer lip crenulate; inner lip arcuate, smooth; umbilicus wide, deep; inner lip fifteen lirate within; aperture pinkish or yellowish within; shell yellowish-white externally. Alt. 32, diam. 25 mill. Aperture, alt. 22, diam. 10 mill.

**C. plicata** Wood.

Shell more or less cone-shaped, umbilicus nearly closed, spire short; whorls four, apex eroded; sutures distinct; sculpture of heavy scabrous, spiral lines, of which there are 18-20, three of which are much larger and heavier than the rest which cut the edge of the outer lip into four scallops; there are ten longitudinal folds; aperture very elongate; outer lip crenulate and scalloped by the spiral liræ; inner lip slightly arcuate, smooth; umbilicus scarcely visible; inner lip very slightly lirate within; aperture very deep purple within sometimes shading to greenish; shell cinereous, sometimes covered with a green coating without. Alt. 28, diam. 17 mill. Aperture, alt. 20, diam. 9 mill.

I have collected *plicata* in large quantities at Vera Cruz, Mexico, from the coral reefs, and have never seen a *galea* among them, although special search was carried on for them. I have specimens of both species from the following localities: St. Thomas, W. I.; Bahamas; St. Croix; Key West, Fla.; Vera Cruz (*plicata* only); Little Cayman, W. I. (collected by C. J. Maynard). This group of shells is one in which great specific variation is likely to occur, on account of their parasitic habit, and great allowance must be made in their determination from this fact; but the species under consideration seem to me to be entirely distinct from one another and, although I have examined over seventy specimens, yet I am not able to place them together.

**Engina Harveyana** Baker.

Shell turbinate, solid, straw-colored with a white band just below the periphery. Whorls 4 +, (the tip in the specimen is broken off) rounded, crossed by longitudinal costæ and spiral liræ; there are seven large, rounded, strongish longitudinal costæ which are crossed by ten strong, rounded spiral liræ, with a finer line between; these spiral lines in crossing the costæ cut them into large, quadrate nodules; aperture very elongate, about half the length of the entire shell; outer lip thickened, with seven denticles upon the inside, the three central ones occupying a small callus in the center of the lip; inner lip provided with three faint tubercles near the lower end, and a single large tubercle near the posterior end of the aperture; there is a slight callus over the columella; aperture pinkish within; canal short, open; umbilicus none; tubercles lighter than the ground color; the interlinear lines reddish-brown; there is a light band just below the periphery on the last whorl.

Alt. 12, diam. 8 mill. Aperture alt. 6, diam. 2 mill.

Habitat, West Coast of Africa.

This species is separated from *Engina corallina* Kiener by the outer lip being more thickened and the three central denticles being placed upon a callus instead of directly upon the outer lip as in the first species. The coloration is entirely different from that of *corallina* being rosy with black lines over the central tubercles, the tips of the tubercles being straw colored and there is a white band below the periphery. There are longitudinal costæ crossed by thirteen spiral lines in *corallina*. The length of *corallina* is 20 mill. while that of *Harveyana* is only 12.

This species is named in honor of Prof. F. L. Harvey of Orono, Maine from whom the specimens were received.